PROTOCONCHS OF CAECUM IN THE MIOCENE OF MARYLAND

BY E. WILLARD BERRY

In examining some material from the Miocene of Jones Wharf, Maryland, for micro-fossils, several tiny specimens of shells with an initial planospiral and a nearly straight annulated cone were found which obviously represented the protoconch and nepionic stage of some species of Caecum. I identify these as *Caecum patuxentium*, the mature shell of which was described by Martin[1] from this locality and horizon in 1904, because of the similarity of the annulations to those on the small end of the mature shell, and because this is the only species of this genus known from Jones Wharf, although a second and somewhat similar species is recorded from the Choptank formation at Greensboro, Maryland. The latter is rare, whereas the former is common at Jones Wharf and at numerous other outcrops of the Choptank formation in Maryland.

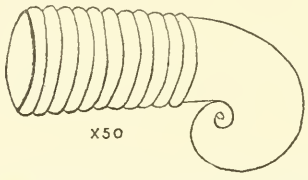

FIG. 1. Early stages of Caecum patuxentium.

Caecum patuxentium is said by Martin to bear a strong superficial resemblance to *Caecum floridanum* Stimpson,[2] differing from the latter in lacking longitudinal markings.

A systematic search would probably disclose protoconchs of Caecum at many Tertiary horizons but so far as I know the only one figured is a poor drawing of *Caecum pulchellum* Brown figured by George W. Tryon, Jr.,[3] in his Conchology, and referred

[1] Martin, G. C., Md. Geol. Survey Miocene, p. 231, pl. 55, figs. 11, 12, 1904.

[2] Stimpson, W., Proc. Bost. Soc. Nat. Hist., IV, p. 112, 1851.

[3] Tryon, G. W., Jr., Structural and Systematic Conchology, Vol. IV, p. 228, pl. 67, fig. 82, 1883.

to the Eocene, the exact horizon and locality not being given. For this reason the following comments seem to be worth placing on record.

The protoconch of *Caecum patuxentium* is entirely smooth and makes three planospiral turns expanding rapidly in diameter to a maximum width of 0.17 and a height of 0.32 millimeters. After the third whorl is completed the smooth protoconch continues for a short distance as a free cone which represents the original apertural region of this stage. Beyond this smooth portion the free and nearly straight cone continues as a strongly annulated portion probably representing the nepionic stage. It bears ten or more strong, regular, close-set annulations similar to those of the mature shell.

The genus Caecum appears in the Tertiary and contains over 100 existing and about 25 extinct species, being widely distributed and most abundant in the later Tertiary and Recent.

YOICHIRO HIRASE

A short time ago we received word from Mr. Shintaro Hirasé, son of Mr. Y. Hirasé, of his father's death, which occurred May 25, 1925.

Few men, and certainly no one in Japan, have done more to advance the study of Mollusca than Mr. Hirasé. His enthusiasm, perseverance and sacrifice for the science of conchology is best described in the following paragraph, taken from a leaflet asking for aid and support for his Conchological Museum:

"At first I used to go myself collecting in different parts of the empire, but finding it very difficult because of a weak constitution, to adapt myself to circumstances, I decided to employ and educate two or three assistants, in spite of limited means, and send them not only to all parts of Japan, but also to many far away groups of islands, such as the Bonins, Loochoos, the Kuriles and Formosa; also to Korea and China, with the view of collecting material for study. The expenses of these explorations amounted to a considerable sum. As I pursued my studies I needed books and magazines which cost a great deal. On the other hand I tried to publish a conchological magazine